ON THE IDENTITY OF *IDEOBISIUM TIBIALE* BANKS (NEOBISIIDAE: PSEUDOSCORPIONES: ARACHNIDA)

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ABSTRACT. The holotype of *Ideobisium tibiale* Banks, from Colorado, USA, is redescribed. This species is transferred from *Microcreagris* Balzan to *Cryptocreagris* Čurčić (Neobisiidae). The diagnosis of the genus *Cryptocreagris* is emended.

The pseudoscorpions originally assigned to the genus *Microcreagris* Balzan 1892 and inhabiting North America north of Mexico have been partially revised by Ćurčić (1984, 1989). While undertaking a further revision of this genus, it became clear that *Ideobisium tibiale* Banks, 1909, was erroneously assigned to the genus *Microcreagris* by subsequent researchers (Hoff 1958; Harvey 1991). The results of the study of the unique holotype of *M. tibialis* are presented here. In addition, this study should further stimulate an analysis of the taxonomic rank of all other North American pseudoscorpions currently assigned to "*Microcreagris*".

METHODS

The holotype specimen was borrowed from the Museum of Comparative Zoology (MCZ), Harvard University, Cambridge, Massachusetts, USA. The specimen, mounted on a slide, was thoroughly examined. Terminology basically follows that used by Čurčić (1984, 1989).

> Family Neobisiidae Chamberlin, 1930 Genus *Cryptocreagris* Ćurčić, 1984

Diagnosis (emendations italicized).—Galea with apical branchlets. Abdominal sternites VI and VII each with 2 anterior discal setae. Sternite VIII with 2 median setae only slightly anterior to other marginal setae (not typical discal setae!). Male genital area: sternite II with a group of median and posterior setae, sternite III with a group of anterior, some intermediate, and a series of posterior setae. Female genital area: sternite II with a group of small setae on each side of the midline, sternite III with a row of posterior setae.

Manducatory process with 4 or 5 (occasionally 3 or 6) setae. Femur and chelal palm of pedipalps

smooth or with inconspicuous granulations. Trichobothriotaxy: esb distal to eb; ist-isb-ib clustered on finger base; it and et located distally on finger tip; esb nearer to it than to ist; st slightly closer to t than to sb (or equidistant from these); sb slightly closer to b than to st (or equidistant from these).

Leg IV: tibia, basitarsus, and telotarsus with 1 tactile seta each.

Type species.—*Microcreagris laudabilis* Hoff. **Subordinate taxa.**—*Cryptocreagris laudabilis* (Hoff), *C. magna* (Banks), and *C. tibialis* (Banks).

Cryptocreagris tibialis (Banks), new combination (Figures 1-6)

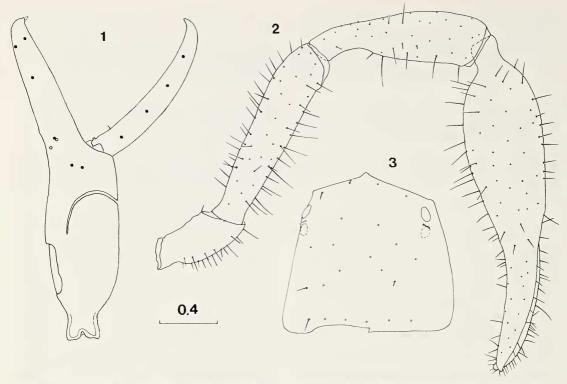
Ideobisium tibiale Banks, 1909:306

Microcreagris tibialis (Banks): Harvey, 1991:345 (full synonymy)

Description.—Epistome low and rounded apically, carapace with 4 + 4 + 4 + 6 + 6 = 24 setae. Anterior eyes with flattened lenses, posteriors spot-like (Fig. 3). Galea with terminal branchlets (Fig. 5). Flagellum with 8 anteriorly pinnate blades.

Tergites I–X with 6-9-9-12-13-?-?-12-12-11 setae. Male genital area: unknown. Female genital area (Fig. 4): sternite II with a group of 6 or 7 setae on either side of midline, sternite III with 23 posterior setae and 5-7 setae along each stigma. Sternite IV with 19 marginal setae and 4-6 setae along each stigma, sternite V with 14 setae. Sternites VI and VII each with 16 or 17 setae and 2 anterior discal setae each. Sternite VIII with 15 setae and 2 setae only slightly anterior to other marginal setae (these two setae are *not* the typical discal setae!).

Pedipalps (Fig. 2): manducatory process with 4 long setae. Fixed chelal finger with asymmetrical distal teeth, gradually becoming square-



Figures 1-3.—Cryptocreagris tibialis, holotype female. 1, pedipalpal chela (trichobothrial pattern); 2, pedipalp (trichobothria omitted); 3, carapace. Scale in mm.

topped and eventually slightly asymmetrical. Movable chelal finger with teeth similar in form and size to those on the fixed finger; only a few distal teeth asymmetrical. Trichobothriotaxy as illustrated (Fig. 1).

Leg IV: tibia, basitarsus, and telotarsus with 1 tactile seta each (Fig. 6).

Measurements (mm). - Body length 4.80. Car-

apace 1.41/1.365. Chelicera 0.84/0.41, movable finger length 0.53, galea 0.13. Pedipalps: coxa 1.04, trochanter 0.88, femur 1.71/0.38, tibia 1.60/0.43, chela 2.98/0.69, chelal palm 1.44, fixed finger 1.54. Leg IV: total length 5.515, coxa 0.78, trochanter 0.60/0.29, femur 1.495/0.35, tibia 1.47/0.185, basitarsus 0.49/0.14, telotarsus 0.68/0.14.

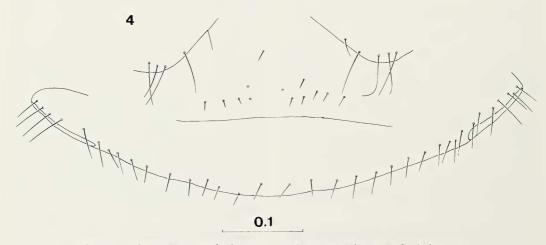
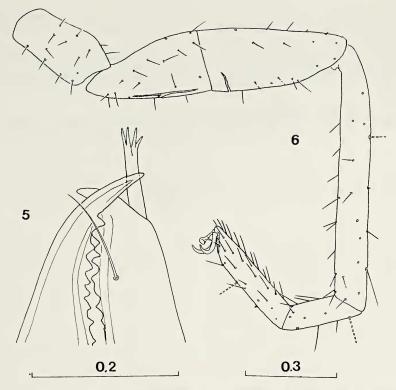


Figure 4.—Cryptocreagris tibialis, holotype female. Genital area. Scale in mm.



Figures 5, 6.—Cryptocreagris tibialis, holotype female. 5, cheliceral fingers; 6, leg IV. Scales in mm.

Tactile seta position/podomere length ratios: tibia IV 0.345, basitarsus IV 0.20, telotarsus IV 0.29.

Distribution.—Colorado, USA.

Remarks.—Hoff (1956) found that the type specimens of *C. laudabilis* showed "considerable agreement with the original description" of *C. tibialis*, which favored his assignment of these two species to the same genus. Interestingly, Hoff (1961) studied three more nymphs (two protonymphs and one deutonymph) from Florissant and from near Gothic, Colorado, USA, respectively. He found that they resembled both *C. laudabilis* and *C. tibialis*, and he pointed out that the similarity "may be only in generic characteristics". Both conclusions of Hoff (1956, 1961) support the assumption that *C. laudabilis* and *C. tibialis* are congeneric.

The material of *C. laudabilis* (Hoff) and *C. magna* (Banks) has been described elsewhere (Ćurčić 1984, 1989).

Specimen examined.—Holotype female (WM 1213.01001), from USA: Colorado: Florissant; 8,000 ft., July-August (year and collector lacking on label).

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